

**PLT16. SYSTEMATIC ASSESSMENT OF THE DANUBE RIVER
ECOLOGICAL ECOSYSTEMS QUALITY**

Elena Stanescu¹, Daniel Scradeanu², Irina Lucaciu¹, Mihaela Scradeanu², Catalina Stoica¹, Stefania Gheorghe¹, Liliana Daniela Niculescu¹, Jana Petre¹, Bogdan Stanescu¹

¹National Research and Development Institute for Industrial Ecology - ECOIND, 71-73 Drumul Podu Dambovitei Street, 060652 Bucharest, district 6, Romania, dcpcalitate@gmail.com

²University of Bucharest, Faculty of Geology and Geophysics, Traian Vuia street 6, district 2, Bucharest, Romania

Abstract

Aquatic ecosystems are fundamental components of natural heritage through their important contribution to maintaining productivity brought ecological and implicitly biodiversity and the human species provide a range of benefits - from multiple uses of water resources, to recreational opportunities.

The area chosen for investigation is the Danube River, from Bazias to Calarasi section and its main tributaries in the Southern part of Romania (Jiu, Olt and Arges). Geographic location of the control sections for sampling in the investigated area was performed by the technique of positioning by satellite (GPS).

The main objective of this study is to assess the current ecological status of the aquatic ecosystems in accordance with the requirements of the EU Water Framework Directive (transposed into Romanian legislation by Law no.310/2004, which amend the Law no.107 /1996)

Keywords: *aquatic ecosystems, Danube River, ecological status*